

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on June 6, 2000, and the references cited therewith.

Claims 1, 3, 10, and 30 are amended and claims 4, 12, and 40 are canceled; as a result, claims 1-3, 5-11, and 13-39 are now pending in this application.

Claims 1 and 30 are each amended with the subject matter of claim 4, which is canceled; therefore no new matter is added to claims 1 and 30. Similarly, claim 10 is amended with the subject matter of claim 12 and, therefore, contains no new matter.

Election/Restriction

The Office Action dated June 6, 2000, stated:

Newly submitted claim 40 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 40 has newly added claimed features regarding sleep mode, such that claim 40 does not have the same scope as the original prosecuted claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 24 is withdrawn from consideration as being directed to a non-elected invention. See C.F.R. 1.142(b) and MPEP 821.03.

Claim 40 is canceled and Applicant reserves the right to continue prosecution of claims 24, 40, and other non-elected claims in divisional and continuation applications.

§102 Rejection of the Claims

Claims 1-3, 5-11, 13-17, 26-28, 30, 33, and 39 were rejected under 35 U.S.C. § 102(b) as being anticipated by LeBlanc et al.(U.S. 5,960,341). Applicant does not admit that LeBlanc is prior art and reserves the right to swear behind it at a later date. This rejection is respectfully traversed because LeBlanc does not teach each and every element of these claims.

Amended claim 1 is not anticipated by LeBlanc et al because claim 1 contains several elements not taught by LeBlanc. First, "a plurality of devices . . . wherein at least one of the devices is selected from the group consisting of sensors, actuators, and controllers" is not taught by LeBlanc. Second, "a plurality of devices, each device coupled to a low power transceiver that transmits and receives information" is not shown by LeBlanc. LeBlanc does not describe the use of low power devices as defined in the application. By using unlicensed frequencies for the low power devices, they may be used in buildings and other structures without concern for interfering with similar devices in other buildings. This is quite different than the cellular phones described in LeBlanc and its prior art section. (LeBlanc, Figure 2, element 16). In LeBlanc, the range of the cellular phones is described in terms of geographic areas. (LeBlanc, col. 3, lines 8 - 12, Figure 2, element 36). To further reflect the differences, claim 1 indicates that the devices have a "short range".

Third, claim 1 recites: "a plurality of router nodes, each router node having a transceiver capable of receiving device information from one or more proximate wireless devices and capable of wireless communication at a higher power level with other router nodes". This element further emphasizes that the range of the devices is short by use of the word "proximate." Thus, LeBlanc is not analogous art, on top of not showing each and every element. It is meant for an entirely different problem than that faced by the present invention. The devices in the present invention are within or near a structure, and have short range to conserve power and to prevent interference with other devices in nearby structures. (Applicant's Specification, page 4, lines 3-22). This very characteristic enables the devices to use frequency and power ranges that do not require licensing, as do the cellular phones of LeBlanc. Fourth, claim 1 includes a controller. The controller described in the application controls both the routing functions as well

as functioning of the devices, as in typical process control environments. (Applicant's Specification, page 7 line 19 to page 8 line 19). It also is quite different from what are termed controllers in LeBlanc by the rejection. (Office Action dated July 6, 2000, page 3, ¶4). As can be seen above, while the terms may be interpreted without resort to the application as similar to devices shown in LeBlanc, they are really quite different as described in the application.

Claims 2 - 3 and 5-9 include all of the elements of claim 1, and hence also distinguish LeBlanc. Further, each of the elements relate further to the use of controllers and date to control the devices. They are not limited to voice transceivers as are the cellular phones of LeBlanc.

Amended claim 10 is not anticipated by LeBlanc et al because, like claim 1, it contains "a plurality of devices . . . wherein at least one of the devices is selected from the group consisting of sensors, actuators, and controllers," which is not taught by LeBlanc. Independent claim 10 also recites the same low power device in a similar manner to claim 1, and is therefore believed to distinguish from LeBlanc. Claim 10 furthers clarifies that low power is synonymous with "short range." It should be noted that the term "short range" is defined in the context of the power limits for current frequencies that do not require licensing. The range identified for current licensing limits is approximately three to six meters. It is anticipated that such range may change as licensing limits change.

Claims 11 and 13 depend from claim 10 and have all the elements thereof in addition to describing the differences in bandwidth between devices and routers.

Claims 14-17 recite elements that allow the controller to convert touch tone commands into signals to control the devices. This is in the context of process control and even more clearly distinguishes LeBlanc by providing functionality which is simply not present in the process control art. One example of the functionality would involve starting a motor.

Claims 26-28 also contain elements that are similar to those in claim 1, but do not positively recite the lower power devices. However, it does point out how one of the routers is directly hardwired into a central controller, and how other routers receive low power transmissions of physical conditions (very different than LeBlanc which deals with phones, not

physical conditions). Further, such received transmissions emanate from devices that are proximate in location. Proximate has been described in the application as different from the "geographic" areas defined in LeBlanc. (Applicant's Specification, page 9 line 28 to page 10 line 2; LeBlanc, col. 3, lines 8 - 12, Figure 2, element 36). Thus, LeBlanc does not contain each and every element recited in independent claim 26 and its dependent claims 27 and 28.

Amended claim 30 is not anticipated by LeBlanc because, like claim 1, it contains "a plurality of devices . . . wherein at least one of the devices is selected from the group consisting of sensors, actuators, and controllers," which is not taught by LeBlanc. Independent claim 30 also recites a router node using similar terminology as claim 26. "Low power transmissions" are received from "devices located proximate the router node".

Claim 33 depends from claim 30 and distinguishes LeBlanc for at least the above reasons. Applicant respectfully requests that the rejection be withdrawn for these reasons.

Claim 39 uses permitted means plus function language, invoking 37 C.F.R. 112(6). The 'means' elements define over LeBlanc, because there is no mention of a cellular phone network in the present application. Further, the means elements track claim 1, and are defined differently than the corresponding elements in LeBlanc which were identified in LeBlanc.

§103 Rejection of the Claims

Claims 4 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over LeBlanc et al. in view of Loosmore et al. (U.S. 5,682,142). Claims 4 and 12 are canceled.

Claims 1 and 10 are amended to include the subject matter of claims 4 and 12. Claims 1 and 10 are patentable over the combination of LeBlanc and Loosmore because the combination of LeBlanc and Loosmore does not teach each and every element of these claims. See above for the arguments showing the elements not taught in LeBlanc, such as using unlicensed frequencies, which is also not taught by Loosmore, nor the combination. Therefore, claims 1 and 10 are patentable and nonobvious over LeBlanc and Loosmore and applicant respectfully request that the rejection be withdrawn.

Claims 31 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over LeBlanc et al. in view of Graham et al. (U.S. 5,351,270). Claims 34 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over LeBlanc et al. in view of Hull et al. (U.S. 5,806,005).

The combination of LeBlanc and Graham does not teach or suggest every element of claims 31, 32, 34, and 35 and, therefore, a prima facie case of obviousness has not been established. The combination of LeBlanc and Graham does not teach or suggest “a plurality of devices . . . wherein at least one of the devices is selected from the group consisting of sensors, actuators, and controllers” which is recited in base claim 30 and inherited by dependent claims 31, 32, 34, and 35. As a result, claims 31, 32, 34, and 35 are believed patentable and nonobvious over the combination.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-373-6972) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents, Washington, D.C. 20231 on October 6, 2000.

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